ANATOMICAL SOCIETY SUMMER MEETING 14th–16th July 2025

St John's College, University of Oxford Oxford, OX1 3JP





Human Cerebral Cortex Development III

Dear Colleagues,

We were thrilled to be appointed to be the organizers and co-chairs of Summer Meeting 14-16th July 2025 at St John's College, Oxford by the Council of the Anatomical Society. We have planned a symposium "Human Cerebral Cortex Development". The symposium will be the main focus of the meeting, allocated almost two complete days, alongside with the usual sessions on imaging and education. We are delighted that we can have a conference at this level on human cortical development.

The symposium will explore various aspects of human cortical development, including cellular and molecular mechanisms regulating cell number and diversity, migration and circuit assembly from the beginning of cortical plate formation until birth. We have selected speakers to invite from around the world who will describe how advances in developmental neurobiology, organoids, transcriptomics and imaging are offering new insights into the mechanisms controlling the development of the human cerebral cortex, as well as the developmental abnormalities and clinical advances.

This symposium is a follow up to two highly successful meetings in 2010 and in 2018 together with the acclaimed issues the Journal Anatomy of of http://onlinelibrary.wiley.com/doi/10.1111/ioa.2010.217.issue-4/issuetoc and https://onlinelibrary.wiley.com/toc/14697580/2019/235/3. We hope you will consider contributing an article; original research or review or opinion piece, long or short, to a new 2025 symposium issue. Please see this as an opportunity to promote younger members of your laboratory or to collaborate with other participants at the symposium to present a fresh view.

With very best wishes,



Zoltán Molnár MD DPhil University of Oxford, UK Gavin Clowry DPhil Newcastle University, UK

Please do share your thoughts across social media.

X: @anat_soc BlueSky: @anatsoc.bsky.social hashtag: #AnatSocSummer25 #AnatSocOxford

Thanks to the Team

Lyndsay Murray- Meetings Officer Hannah Webb- Anatomical Society Meetings Administrator anatomicalsocietymeetings@gmail.com



The Auditorium, Garden Quadrangle, St John's College, St Giles, Oxford OX1 3JP, UK

11. North Lecture Room

22. The Barn/Artist's Studio

Early career pre conference workshop

Date and Time: 14th July, 10 am to 12 pm. St John's College)

Venue: Medical Science Teaching <u>Centre</u> (13 mins walk from

In recent years, The Department of Physiology, Anatomy and Genetics (DPAG) and the Medical Science Division (MSD) of Oxford University have embraced innovative teaching methods along with conventional teaching and learning for pre-clinical and biomedical students. At the pre-conference event, attendees will witness this remarkable transformation, discovering how the department uses creativity and innovation to inspire and educate our students. If you are eager to explore our facility and resources, please <u>register</u>, as spaces are limited. To know more about our recent work visit <u>here</u>.

Journal of Anatomy Early Career Research Workshop

Date and Time: 14th July 12pm-1pm. Venue: The Auditorium, The Garden Quadrangle

This is an interactive workshop chaired by the Journal of Anatomy Editors and Early Career Researcher Editorial Board. The goal of the session is to inform authors of the requirements for publication, reviewing and editing and avoid common pitfalls that are frequently a barrier to acceptance in a journal. The workshop aims to demystify the editorial and reviewing processes. Note: if you wish to attend the workshop please ensure that you join the earlier lunch sitting for this day.

Oral Presentation

Please bring your PowerPoint presentation in a form that we can easily upload to the AV computer, and find our helpers to hand over your slides for your presentation <u>before</u> your session begins. Presentations will be in the Auditorium of the Garden Quadrangle.

Poster Presentations

- Poster session 1: Monday 14th July 6-7pm in the Bar marquee, Thomas White Quadrangle
- Poster session 2: Tuesday 15th July 12:30-1:30pm in the Bar marquee, Thomas White Quadrangle Presenters in Poster session 1 will be allowed to display their poster between midday on Monday 14th and midday on Tuesday. Those assigned Poster session 2 can display their poster between midday on Tuesday on Tuesday 15th until the end of the meeting.

Anatomical Society Cave Young Investigator best poster prize

Awarded for the best poster presentation by an attendee, normally of relatively junior status at the AS summer meeting. The work presented shall have been carried out while the first author was an undergraduate or postgraduate student and presented within 1 year of the award of the Doctorate. Young Investigators will be judged during the poster sessions.

Sophie Miller Prize Presentation

Date and Time: Tuesday 15th July 2:25pm

Orla Mitchell- Early life adversity and brain structure: A longitudinal structure human MRI study.

Dr Sophie Miller was an Anatomical Society funded PhD student from 2011-2014 at the University of Cambridge. She investigated olfactory ensheathing cells (OECs) and their potential for transplant-mediated repair of the central nervous system. During this time, she presented at many Anatomical Society meetings, with one of the publications from her PhD work appearing in the September 2016 issue of the Journal of Anatomy. Sophie was particularly supportive to her other early career researchers and colleagues in scientific and career development. She passed away in December 2016. In her memory, her family have generously provided support for young and aspiring anatomical researchers through the Anatomical Society.

Tea and coffee breaks

Refreshments will be held in the bar marquee in the Thomas White Quadrangle.

WiFi

The Cloud Wifi is free to use across St John's college.

Buffet Lunch

The buffet lunch will be held on Monday and Tuesday 12-2pm in The Hall at St John's College and will be in two sittings. If you are registered to attend the Journal of Anatomy workshop please attend the first sitting on Monday.

Drinks receptions

Date and Time: Monday 6pmVenue: The Bar MarqueeSponsored by AnatomageDate and Time: Tuesday 6:45pmVenue: in the Canterbury Quadrangle

Early Career and Student Social

Date and Time: Monday 14th July 7pm. Venue: TBC

There is an early career and student social following on the first evening of the conference, hosted by the early career team of the <u>Anatomical Society</u> from 7pm. Casual drinks and a few fun social activities to help you get to know others in a similar position in their careers. Everyone is welcome! If you have any questions contact Samuel Snowdon- samueljsnowdon@gmail.com

Photography exhibition and drinks

Date and Time: Monday 14th July 6:30pm. Venue: The Barn Gallery

A drinks reception along with a chance to see the black and white photography exhibition by Caroline Seymour: Beyond Fear. Surgery, Hands, Healing. With a speech by Anatomical Society president Tracey Wilkinson.

Gala dinner details:

Date and Time: Tuesday 15th July 7:30pm

The gala dinner is to be held in the 16th Century Hall at St John's College. This will include an after dinner speech by the college President Professor Sue Black, Lady Black of Strome LT. Tickets have been sold separately.



A private viewing of this exhibiton by Caroline Seymour will be held on Monday, 14th July from 6:30 in the Barn gallery.

The exhibition shall be opened by the President of the Anatomical Society Professor Tracey Wilkinson

BEYOND FEAR Surgery, Hands, Healing

I



Beyond Fear is an exhibition of black and white photographs by Caroline Seymour, documenting patient journeys through cancer.

Over the last five years Caroline has photographed several patients, before, during and after surgery. She worked in close collaboration with surgeons and their teams at the John Radcliffe Hospital and Nuffield Orthopaedic Centre in Oxford, and with the patients and their families.

This exhibition will combine two series of challenging images. The first, taken in 2019 and 2020, was of patients with breast cancer, and was first shown during Photo Oxford 2021. The second, of patients with bone sarcomas, was shown at The Royal College of Surgeons of Dublin, Glasgow and London, in 2024. Images from both series were also juxtaposed with her photographs of details of old master paintings and sculpture from national collections in a book, *Beyond Fear*, Dewi Lewis Publishing, 2024.

In addition to this, by kind permission of the owner, we are privileged to be able to show two of Barbara Hepworth's surgical drawings, made in the late 1940s.

The exhibition runs from July $10^{th}\,$ to 25^{th} in The Barn Gallery, St John's College, Oxford Opening hours: 11 am to 6 pm

Exhibition celebrating the founder of neurology, Thomas Willis (1621-1675) - Neurologist - Chemist - Physician -

St John's College Library & Study Centre 11-16 July, the entrance is located in the Canterbury quadrangle



Thanks to Dr Petra Hoffmann

https://stjohnscollegelibraryoxford.org/2024/05/13/thomas-willis-1621-1675-neurologist-chemist-physician/

Reference: Z Molnár (2021) On the 400th anniversary of the birth of Thomas Willis. Brain 144 (4), 1033-1037

Anatomical Society Oxford Meeting 2025 Schedule 10 and 25 min talks.

Day 1	Auditorium	Other locations
9.30 onwards		Registration: Porters' lodge
		then from 12 at the Garden
		quad. auditorium foyer
10:00-12:00		Pre-meeting workshop:
		Anatomy Suite, Oxford
		University Medical Sciences
		Teaching Centre
12:00-2:00		Buffet lunch in the hall
1:00-2:00	Workshop: How to get published in the Journal of Anatomy	
2.00-2.10	Opening remarks:	
	Tracey Wilkinson, Zoltán Molnár, Gavin Clowry	
2.10-3.55	Symposium session 1. Chair- Flora Vaccarino	
2.10-2.35	Madeline Lancaster- Exploring mechanisms controlling human	
	brain evolution using organoids	
2.35-3.00	Katie Long- How the extracellular matrix shapes the	
	developing human cortex.	
3.00-3.25	Eva Anton- Primary Cilia: A Novel Signaling Gateway to	
	Cortical Neural Circuits	
3.25-3.35	Thomas Theil- Modelling the role of the primary cilia gene	
	CEP41 in autism spectrum disorder using human cortical	
	organoids	
3.35-3.45	Sinaoife Andrews: Elsevier Presentation- Complete Anatomy	
	New Neuroanatomy Model	
3.45-4.15		Refreshments in the Marquee
4.15-5.50	Symposium session 2: Chair- Masahiro Tsuji	
4.15-4.40	Rebeccah Slater- The painful brain: developing pain	
	perception in early infancy	
4.40-5.05	Jetro Tuulari- Prenatal exposures and early life neuroimaging	
	– the importance of looking beyond the first weeks of life	
5.05-5.30	Ana Namburete- Mapping Fetal Brain Anatomy with	
	Ultrasound and Al.	
5.30-5.40	Michael O'Connor- Mapping Early Psychosis: Hippocampus	
	and Amygdala output differences in Adolescents with	
	Psychotic Experiences	
5.40-5.50	Aaron Barron- Peripheral immune proteins predict reduced	
5.10 5.50	cortical thickness in 5-year-old human children	
6:00-7:00		Poster session 1 and drinks
		reception sponsored by
		Anatomage in the Marquee
6.30-8:00		Art exhibition, drinks in
• •		The Barn – speech by
		Anatomical Society President
		Tracey Wilkinson.
7:00 onward		Student Social event location
7.00 01Walu		
		TBC

Day 2	Auditorium	Other locations
8.25-10.40	Symposium session 3: Chair-Gavin Clowry	
8.25-8.35	Aarushi Vaidya-Can early forebrain patterning/	
	holoprosencephaly (HPE) be modelled <i>in vitro</i> using 2D and/or	
	3D human induced pluripotent stem cell models?	
8.35-8.45	Daniel Berg- Mapping and modelling neural stem cell	
	dynamics in the developing human dentate gyrus	
8.45-8.55	Muhammad Assir- IL-17A Alters Human Cortical Development	
	in a 3D Ex Vivo Model of Maternal Immune Activation	
8.55-9.05	Andrew Copp- Chiari II brain malformation is secondary to	
	open spina bifida: evidence from a new mouse genetic model	
9.05-9.15	Nicoletta Kessaris- Molecular multitaskers: the pleiotropic	
	power of transcriptional co-factors in mouse cortical	
	development	
9.15-9.40	Chiaki Ohtaka-Maruyama- Molecular Basis of Subplate Layer	
	Expansion in Human Fetal Brain Development	
9.40-10.05	Arnold Kreigstein - Genomic insights into human brain	
	development and disease	
10.05-10.30	Maxwell systems presentation: Anastasiia Tourbier- Next-	
	Generation Electrophysiology for Functional Characterization	
	of Human Neural Organoids and Assembloids.	
10.30-11.00		Refreshments in the Marquee
11.00-12:00	Symposium session 4: Chair- Alain Chedotal	
11.00-11.25	Nenad Sestan- Origins of the Prefrontal Cortex and Cognitive-	
	Emotional Networks: What Makes Us Human	
11.25-11.50	Zeljka Krsnik- Initial regional patterning and laminar dynamics	
	in the developing human prefrontal cortex.	
11.50-12.00	Mohammed Abuelem- Cortical Layer 6 Drd1a-Cre+ neurons	
	mediate dopaminergic-driven activation of the murine medial	
	prefrontal cortex	
12:00-2:00		Buffet lunch in Hall
12:30-1:30		Poster Session 2 in Marquee
2.25-3.40	Symposium session 5: Chair- Zoltan Molnar	
	Sophie Miller prize talk: Orla Mitchell- Early Life Adversity &	
	Brain Structure: A Longitudinal Structural Human MRI study.	
2.25-2.50	Masahiro Tsuji- Pathophysiology of neurodevelopmental	
	disorders associated with low birthweight.	
2.50-3.15	David Price- Variation in human brain development.	
	Sponsored by Primal Pictures	
3.15-3.40	Helen Stolp- Short- and long-term effects of acute early-life	
	activation of the GABA _A receptor on neuronal development.	
3.40-4.10		Refreshments in the Marquee
4.10-5.50	Symposium session 6: Chair- Zeljka Krsnik	
4.10-4.35	Alain Chedotal- tridimensional analysis of human nervous	
	system development	
4.35-5.00	Anton Tonchev- An insight into human cortical development	
	from adult neurogenesis	
5.00-5.25	Tim Zolnik- Orexin-activated neurons of the human cortex	

5.25-5.50	Sara Bandiera- Extrinsic modulation of cortical development by early thalamic innervation in the human foetal brain	
6:00-6.30	History of neuroscience lecture on Thomas Willis (1621-1675): Zoltán Molnár. Introduced by the President of the Anatomical Society Tracey Wilkinson.	
6.45 for 7.30		Drinks reception at the Canterbury Quadrangle, conference photograph at 7:00 followed by the Gala dinner in The Hall

Day 3	Auditorium	Other locations
8.30-10.30	Symposium Session 7. General Anatomy and Education:	
	Chair- Cecilia Brassett	
8.30-8.40	Jason Sparks- Pituitary adenylate cyclase-activating	
	polypeptide (PACAP) mediates bacterial endotoxin-induced	
	fever via an effect on cyclooxygenase-2 and inflammatory	
	cytokines in mice.	
8.40-8.50	Natalia Penar- Mechanisms of epithelial symmetry-breaking	
	during mammalian morphogenesis	
8.50-9.00	Eavan Pakenham- Selenium and Magnesium Functionalised	
	Scaffolds for Dual Bone Regeneration and Anti-Cancer	
	Therapy	
9.00-9.10	Louise Hosty- Development of a Pro-Angiogenic Hyaluronic	
	Acid Hydrogel Decorated with Vascular Cell-Derived ECM	
9.10-9.20	Meric Goker- Advanced Synovial Microneedle Technology for	
	Drug Delivery to Prevent Post Traumatic Osteoarthritis	
9.20-9.30	Sophie Mok- Evaluating osteoblast-fibroblast co-culture in a	
	multiphasic calcaneofibular bone-ligament scaffold	
9.30-9.40	Anne O'Callaghan - Developing an Injectable Hyaluronic Acid-	
	based Hydrogel Containing Non-viral P2X7R Silencing RNA	
	Nanoparticles For The Treatment Of Post-Traumatic Temporal	
	Lobe Epilepsy	
9.40-9.50	Ryan Smith- A simplified clinically applicable classification of	
	Circle of Willis variants.	
9.50-10.00	Honey Zahra- Exploring Anatomy Education: A Comparative	
	Analysis of Cadaver Dissection and 3D Anatomical Study Tool	
10.00-10.10	Leandros Rapteas- Equipping future clinicians: Inclusive	
	anatomy teaching amid legal and social challenges to gender	
	equity	
10.10-10.20	Andras Nagy- exploring the teaching traditions of Central	
	European anatomists through the Erasmus+ LEANbody	
	collaborative project	
10.20-10.30	Anatomage presentation: Daniela Cacciabue- Anatomy at	
	Sheffield- From Scalpel to Virtual Dissection and Beyond	
10.30-11.20	Symposium session 8: Chair- Nenad Sestan	
10.30-10.55	Tom Nowakowski- Uncovering the strategies of human radial	
	glia using high throughput genomics	

10.55-11.20	Becky Carlyle- Advances in human brain proteomics; Increased-throughput, sub-cellular discovery, and post- translational modifications	
11.20-11.50		Refreshments in the Marquee
11.50- 1.10	Symposium session 9: Chair-David Price	
11.50-12.15	Flora Vaccarino- Organoid models of human brain development and developmental disorders	
12.15-12.40	Faye McLeod- Modelling monogenic epilepsy in human foetal brain slice cultures	
12.40-1.05	Luana Campos Soares- 3D printing cortical progenitors to study human brain development	
1.05-1.20	Closing remarks and prizes.	

With thanks to our sponsors...















and Enatom

You can find the sponsors in the Bar Marquee in the Thomas White Quadrangle.

	Poster	Poster	
Name	Session	Number	Young Investigator
Hitomi Achiwa	2	7	Young investigator
Maznah Abdullah Alhesain	1	3	Young investigator
Alaa Alshwayyat	2	9	Young investigator
Diyya Ameen	1	22	Young investigator
Laura Andreae	1	5	
William Antcliff	2	15	Young investigator
Lauren Barrett	2	10	Young investigator
Denis Barry	1	6	
Ashley Benge	1	17	Young investigator
Thewarid Berkban	1	24	
Sourav Bhattacharjee	1	1	
Mihaela Bobic-Rasonja	2	4	
Patrick Cavanagh	2	13	Young Investigator
Arada Chaiyamoon	1	20	
Advait Dinesh	2	21	Young Investigator
Peter Dockery	1	9	
Anuch Durongphan	1	19	
Sid Xiuyan Gao	2	18	Young investigator
DoHyeon Gim	1	12	
Asmita Goswami	2	28	
Pedro Hecht-López	1	27	
Ernie Ho	1	8	Young investigator
Lara Jane Ismair	1	13	Young investigator
Daniel Johnston	2	25	
Aragorn Jones	2	1	
Karuna Katti	2	31	
Saima Khan	2	26	
Radik Khayrullin	1	21	
Janja Kopic	2	8	
Georgia Koudigkeli	2	19	Young investigator
Lelika Lazarus	1	15	
Mariah Lelos	2	11	Veuesieusstisster
Viktoria Levkanicova ChunKim Lim	1	11	Young investigator
Rashmi Malhotra	1	4	Young investigator
Irene Manjaly	2	22 27	Young investigator
	1		Young investigator
Lana Manjouneh Zdravko Potaniok	2	10 6	Young investigator
Zdravko Petanjek Yasmine Popa	2	24	Young investigator
Sharmila Saran Rajendran	1	24	Toung investigator
Leandros Rapteas	1	25	
Jessica Roles	2	23	Young investigator
Femina Sam	2	20	
Rarinthorn Samrid	1	18	Young investigator
	T	10	ioung investigator

Shreya Sankar	1	7	Young investigator
Montserrat Rayman Silva	2	29	
Rumyana Smilevska	1	28	
Pavan Sohal	2	17	Young investigator
Jason Sparks	1	29	Young investigator
Imani Stanard	1	23	Young investigator
Dimo Stoyanov	1	2	
Daiki Sugita	1	31	Young Investigator
Jagraj Thandi	2	12	
Seyedeh Torabi	2	30	
Sara Valkila	2	5	Young investigator
Thomas Van-Parys	1	16	Young investigator
John Varghese	1	30	Young investigator
Zak Vincent	1	14	Young investigator
Natalie Wucherer	2	2	Young investigator
Emily Malini Young	2	16	Young investigator
Lusi Zhao	2	3	Young investigator